M/037/0026
cc: Tom

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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File: UTU-69800
UTU-69812
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Date: 08/20/10
To: Minerals Files UTU-69800, UTU-69812
From: Ted McDougall, Geologist
Subject: Surface Management Site Inspection, Denison Mines (USA) Corp, La Sal Mines (Pandora – UTU69800/M0370012; LaSal, Snowball and Beaver– UTU69812/M0370026), San Juan County, Utah.

Date of Inspection: 08/16/2010
Time of Inspection: 9:00 A.M.
Participants: Ted McDougall, Danny Flannery
Legal Description: T. 29 S., R. 24 E., Section 01
Claimant/Operator: Denison Mines
Bond Amount: $175,811 for Pandora Mine
Date of Last Bond Review: 10/19/09 for Pandora Mine

I was asked to conduct a site inspection of the Pandora Mine Operation in order to assist the Moab Field Office in completing some of its backlog surface management workload. Denison Mines has submitted a Plan Modification which consolidates all of its LaSal Mines (Pandora, Snowball, LaSal, and Beaver Shaft) into one operation so I decided to concentrate on the Pandora Mine but visit the other sites in the LaSal Mines Complex as time allowed.

Pandora Mine

The Pandora Mine is the largest mine site in the LaSal Mines Complex. Denison's contractor, Reliance Resources, is mining the Pandora. According to Danny Flannery, Reliance's contract has been scaled back due to current uranium prices. Mine production has been cut from approximately 7,500 tons/month to 3,500 tons/month. The mine has been downsized from 20-25 employees to an existing crew of 5-7.

There are two issues of immediate concern at the Pandora Mine; 1) Waste rock disposal and, 2) Mine ventilation.

Waste Rock Disposal - The waste rock dump needs to be expanded to accommodate continued mine production. However, the toe of the dump occupies the full extent of the permit area. To avoid getting outside the permit area, the waste rock is simply being stacked higher on the top of the dump. There is some concern that the dump could become unstable if slopes are over steepened. However, I didn't observe any excessive erosion or other signs of slope instability. The slope of the dump appears to be maintained at the material's angle of repose. The bigger problem for the operation may be the loss of available space for waste rock disposal. As the dump gets higher, the surface area on top of the dump becomes smaller and the haul route becomes steeper. There is also a concern for proper storm water control because of the dumps encroachment against and onto the canyon rim. Expansion of the dump would alleviate the concern but, extending the dump beyond its current footprint requires a Plan Modification. In December 2009, the Moab Field Office received a Plan Modification for the LaSal Mines Complex which includes the needed dump expansion at the Pandora Mine. Approval of that modification is still pending. After reviewing the situation on site, it appears that it may be possible to pile some additional waste rock at the south end of the ore pad. This would not require a Plan Modification. However, sufficient area would have to be maintained for stockpiling ore and getting haul trucks in and out. Danny said he would follow-up with the contractor to see if there is room to accommodate temporary waste rock storage in that area. Should it become necessary, an alternative may be to haul waste rock from the Pandora Mine to the dump at the LaSal Incline.

Dump expansion will necessitate re-route of the natural drainage which requires a Stream Alteration Permit from the State of Utah. A silt fence has been installed along the toe of the dump. However, no catchment basins or diversion ditches for storm water were observed. These structures should be included in Denison's Storm Water Pollution Prevention Plan for the project.

No topsoil stockpile(s) from the historic operation was observed. This will become an issue for reclamation. The valley fill material underlying the area of proposed expansion should be a good source of suitable growth medium and provide some relief in meeting reclamation needs. The full depth of this material should be excavated and stockpiled as a condition of dump expansion.

Mine Ventilation – The Pandora Mine has an extensive network of underground workings which require good ventilation for worker safety. As the underground workings expand, additional vents are required in order to maintain air quality in the mine. On September 10, 2009 the Moab Field Office accepted a Plan Modification which authorized the construction of two vent holes on BLM administered land. One of the two holes (vent 3-09) was constructed in November 2009. The other vent hole (vent 4-09) has not been constructed. The BLM approved the two vents after determining the new vents constituted a minor modification to the Plan which did not require additional NEPA compliance. That decision was appealed by Uranium Watch. In consultation with the Regional Solicitor, the BLM is now reconsidering its decision.

Danny and I visited the newly constructed vent 3-09, referred to by Denison as Pandora #12. A cut/fill pad has been constructed in the slope. A maximum cut of 8 feet occurs directly behind the vent. Total disturbance is estimated to be less than a ¼ acre. The vent hole is located on the northeast side of the pad, opposite the fill slope. The 6-ft borehole is lined at the surface with a galvanized culvert extending approximately 14 inches above a small concrete pad. The fan is located underground so there is no fan housing and diffuser at the surface. A steel grate is secured over the

opening. The disturbed area is larger than needed for future access and maintenance purposes so I talked to Danny about doing both concurrent and interim reclamation on site. The area south of the vent should be reclaimed. Concurrent reclamation can be done at that location by bringing the fill material back to the approximate slope contour and then seeding. The remaining area should have interim reclamation work done by dressing the western fill slope, pulling the trees back over the site and then seeding. Topsoil was not stockpiled on site as part of construction. Therefore, site reclamation should be monitored and if necessary, Denison could be required to apply soil amendments during final reclamation.

Other – A pile of discarded mine debris including, brattice, pallets, chain link, and common trash was located on top of the waste rock dump. We noted that the on-site trash container was nearly empty. We immediately went to the mine office and Danny talked to the mine foreman about the incident. He stressed that disposal of trash in the waste rock dump was not an acceptable practice. Before we left the site, a loader was dispatched to clean up the site.

Three fuel storage tanks were observed on site. The tanks are contained by berms and a synthetic liner. The containment is designed to hold at least 1 ½ times the volume of the largest tank.

Snowball Mine

The Snowball Mine is located a short distance up the canyon from the Pandora Mine. The mine is currently idle. The portal and mine adit provides intake air for the Pandora and is also used as an alternative escape route. The mine portal is secured with a locked gate. A silt fence has been installed around the toe of the old waste rock dump. However, similar to the Pandora, no catchment basin for storm water was observed.

LaSal Incline

Ore production is not occurring at the LaSal Incline. The incline is being used only for ventilation and for access to the underground workings in the LaSal Mines Complex. Denison anticipates that they will eventually begin to haul ore and waste rock from the mine as specified in the existing Plan. The buildings and yard at the LaSal Incline are being used as the main office, shop and warehouse for the current LaSal operations. Since no ore or waste rock production is occurring at the LaSal Incline, the waste rock and ore pad facilities were not inspected.

Beaver Shaft

Uranium ore is currently being produced at the Beaver Shaft. Unlike the other mines in the LaSal Complex, the ore is hoisted to the surface through a shaft. Mine facilities occur on both private and BLM land. Based on a map prepared by Denison Mines, it appears that the east waste rock dump is entirely on BLM as well as a portion of the west dump. As with the other mines visited, no catchment basins were noted at the dumps to contain storm water runoff.

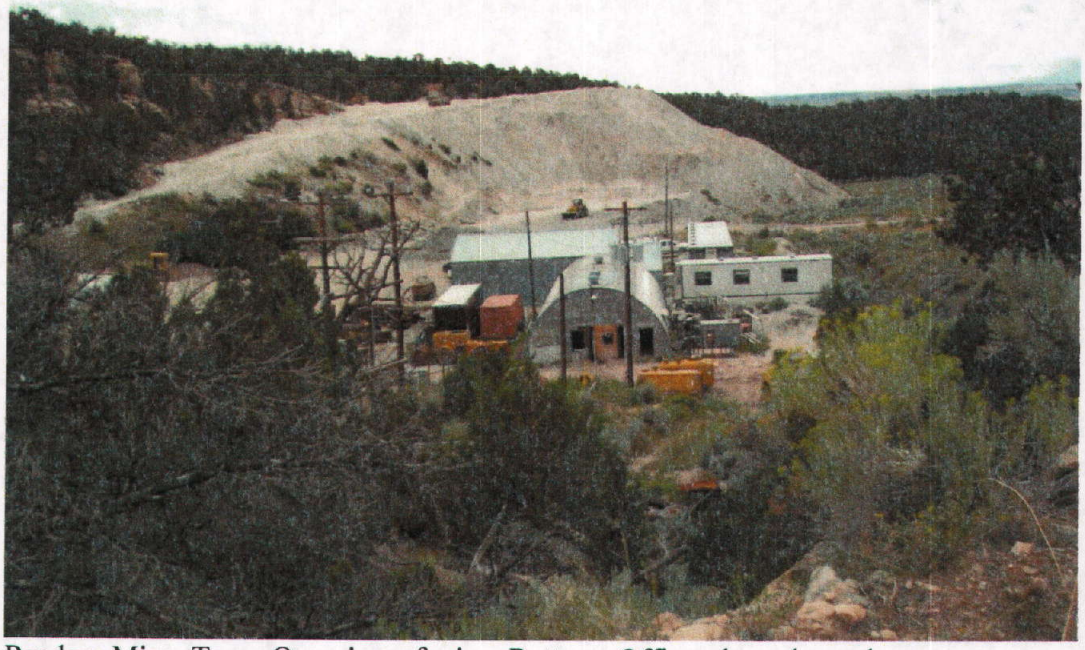
While visiting the east waste rock dump we observed a black bear feeding on a number of cattle carcasses just beyond the toe of the dump. According to Danny, the adjacent land owner uses the site to dispose of cattle that die during winter or occasionally throughout the year. The carcasses are not being disposed of in a pit but are scattered on the surface. Danny thought there may be up to 20-30 carcasses but he always understood the site was on private land. Based on Denison's maps, it appears the carcasses are being disposed of on BLM administered surface.

Denison is currently drilling on private land west of the Beaver Shaft in an effort to better delineate

the orebody for future development purposes. While visiting the Beaver Shaft, Danny showed me the site of its recently failed vent hole operation where the ground collapsed and Denison lost the entire raise-boring machine down hole. The site is on private land.

Conclusions/Recommendations

- The expansion of the existing waste rock dump and additional vent holes are essential to the continued operation of the Pandora Mine. However, these changes require a modification of the Plan of Operations. The BLM Moab Field Office received a Plan Modification in December 2009. In order to lessen the likelihood that operations will have to be suspended at the Pandora Mine, BLM's review of the Plan Modification and Denison's response to any needed changes should be as expeditious as possible so that the NEPA process can move forward.
- Denison Mines should consult with its contractor at the Pandora to determine if there is room to accommodate some interim stockpiling of waste rock on the far south end of the ore pad, adjacent to the existing waste rock dump. Should it become necessary, an alternative may be to haul waste rock from the Pandora Mine to the dump at the LaSal Incline.
- Denison Mines should complete both concurrent and interim reclamation of the pad area at vent 3-09 (Pandora #12)
- The valley fill material underlying the area of the proposed Pandora Dump expansion may be a suitable source of growth medium for reclamation. Denison Mines should consider excavating the full depth of this material and stockpiling it for future reclamation use. The BLM should consider the handling of this material in its review of the proposed dump expansion.
- Unless previously included, Denison's Storm Water Pollution Prevention Plan (SPPP) for the project should include catchment basins to contain surface run-off from disturbed areas, including all of its waste rock dumps.
- Denison Mines should continue to monitor its waste rock dumps to ensure that all trash is placed in the intended trash containers. All trash should then be hauled off site to an authorized disposal facility.
- Unless previously authorized, the Moab Field Office may want to visit the east waste rock dump of the Beaver Shaft to determine if cattle carcasses are being disposed of on BLM surface.



Pandora Mine. Top – Overview of mine; Bottom- Office, shop, dry and warehouse.

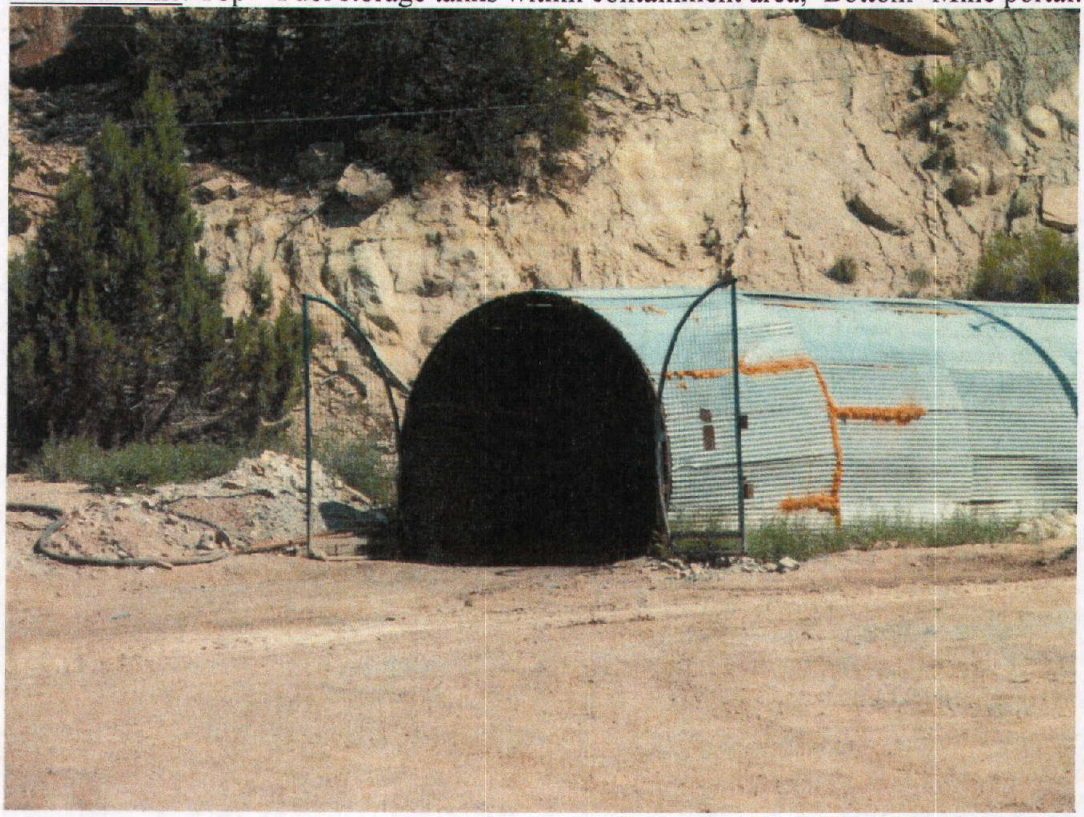
Pandora Mine. Top – Waste rock dump; Bottom – View from top of dump looking toward the area of proposed expansion. Note silt fence at toe of dump.

Ore pad at the Pandora Mine. Note possible area for interim storage of additional waste rock just beyond loader.

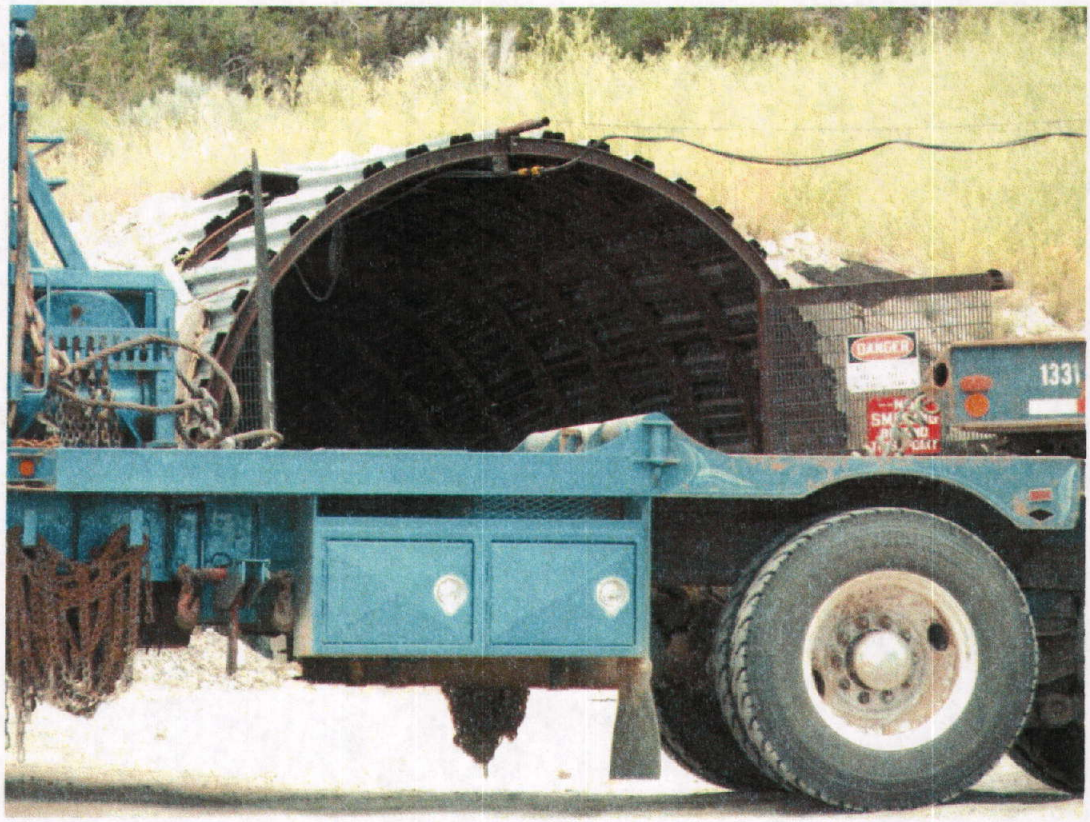
Newly constructed vent 3-09 (Pandora #12) and associated pad.

Pandora Mine. Top - Trash dumped on the top of the waste rock pile; Bottom – nearly empty trash container.

Pandora Mine. Top – Fuel storage tanks within containment area; Bottom- Mine portal.



Snowball Mine. Top – Locked gate at mine portal; Bottom – Waste rock dump.



LaSal Incline. Top – Mine portal; Bottom –Office, yard and warehouse.

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Beaver Shaft. Top – Head frame and hoist house; Bottom – West waste rock dump.

Beaver Shaft. Top – Top of east waste rock dump; Bottom – Black bear feeding on cattle carcasses near bottom of east waste rock dump.

Top – Raised-boring machine. Bottom – 8'ft head for raised-boring machine. Denison lost a similar machine when a site near the Beaver Shaft collapsed while boring a new vent hole.